Volume 190 1988

Contents

Letters to the Editor

Which star in the complex Sk-69 202 is the Supernova 1987 A Progenitor?
Testor, G. L1

The infrared spectrum of the symbiotic star CI Cyg at phase 0.5
Bensammar, S., Friedjung, M., Letourneur, N., Maillard, J.P. L5

A synchronous variation of polarization angle in OJ 287 in the optical and radio regions
Kikuchi, S., Inoue, M., Mikami, Y., Tabara, H., Kato, T. L8

Detection and photometry of a complex system in the center of the A 2218 cluster of galaxies
Pello-Descayre, R., Soucail, G., Sanahuja, B., Mathez, G., Ojero, E. L11

First radio astronomical estimate of the temperature of Pluto
Altenhoff, W.J., Chini, R., Hein, H., Kreysa, E., Mezger, P.G., Salter, C., Schraml, J.B. L15

The Cepheids of the young LMC cluster NGC 1866
Storm, J., Andersen, J., Blecha, A., Walker, M.F. L18

The two-point group-group correlation function
Yi-peng Jing, Jia-lu Zhang L21

Observations of Sgr A West and Sgr A* at λ 1.3 mm
Zylka, R., Mezger, P.G. L25

A third harmonic in the radial velocity of the AM Her system EF Eridani (= 2A 0311-277)
Östreicher, R., Seifert, W. L29

Cosmology

The "ino" mass and the cellular large-scale structure of the Universe
Ruffini, R., Song, D.J., Taraglio, S. 1

Extragalactic astronomy

A new determination of the frequency of supernovae
Cappellaro, E., Turatto, M. 10

Percolation and synchrotron emission. I. The case of spiral galaxies
Zaninetti, L. 17

Molecular hydrogen in H II regions in the Magellanic Clouds
Israel, F.P., Koornneef, J. 21

Constraints on the soft X-ray continuum of AGN derived from photoionization models
Binette, L., Courvoisier, T.J.-L., Robinson, A. 29

Radio continuum observations of M 82
Klein, U., Wielebinski, R., Morsi, H.W. 41

Millimeter observations of Markarian galaxies
Krügel, E., Chini, R., Kreysa, E., Sherwood, W.A. 47

Stellar kinematics in the SB0 galaxy NGC 6684
Bettoni, D., Galletta, G. 52

Galactic structure and dynamics

W 58 G: a distant H II region in the H I Cygnus arm
Georgelin, Y.M., Boulesteix, J., Georgelin, Y.P., Le Coarer, E., Marcelin, M., Monnet, G. 61

Expected rate of neutrino bursts from collapsing stars in our Galaxy and the LMC
Galeotti, P., Raiteri, C.M. 69

Formation, structure and evolution of stars

The stagnation stage and UV delay in the early rise of dwarf-nova outbursts
Mineshige, S. 72

Optical and infrared observations of the carbon Mira R Fornacis Dust shell modelling as a function of phase
Le Bertre, T. 79

Ohmic heating: a possible spindown mechanism for long-period isolated pulsars
de Jager, O.C., Nel, H.I. 87

Stellar atmospheres

Temporal polarization variations of Be stars. III. The polarimetric behaviour of X Persei
Clarke, D., McGale, P.A. 93

Singly ionized iron as a diagnostic of stellar envelopes. II. The structure of the envelopes of six luminous blue stars
Muratorio, G., Friedjung, M. 103

High resolution spectroscopy of central stars of planetary nebulae. I. Basic atmospheric parameters and their interpretation
Méndez, R.H., Kudritzki, R.P., Herrero, A., Husfeld, D., Groth, H.G. 113

A mechanism for the irregular variability of supergiant stars
Buchler, J.R., Goupil, M.-J. 137

Spectroscopic surface gravities and chemical compositions for 8 nearby single sub-giants
Edvardsson, B. 148

Carbon, nitrogen, sulfur and silicon isotopic ratios in the envelope of IRC+10216
Kahane, C., Gomez-Gonzalez, J., Cernicharo, J., Guélin, M. 167

MHD waves from inhomogeneous accretion in T Tauri stellar magnetospheres
Scheurwater, R., Kuijpers, J. 178

Kinematic properties and density structure of average Be star envelopes derived from Fe II emission line analysis
Hanuschik, R.W. 187

The shock wave velocity in Mira stars
Gillet, D. 200

Diffuse matter in space (including HII regions and planetary nebulae)

Chemical equilibrium from diffuse to dense interstellar clouds. III. The model of the diffuse cloud ζ Ophiuchi revisited
Viala, Y.P., Roueff, E., Abgrall, H. 215

Radio and infrared structures of type I post-main sequence nebulae
Phillips, J.P., Mampaso, A. 237

Molecular cloud fluctuations
Stenholm, L.G. 259

High velocity Herbig-Haro objects near Cep A
Lenzen, R. 269

The β Pictoris circumstellar disk. VI. Evidence for material falling on to the star
Lagrange-Henri, A.M., Vidal-Madjar, A., Ferlet, R. 275

The nature of the reflection nebula associated with NGC 7538/IRS 9
Eiroa, C., Lenzen, R., Gomez, A.I. 283

CO $J=3$–2 and $J=2$–1 spectroscopy and mapping of ten high velocity molecular outflow sources
Phillips, J.P., White, G.J., Rainey, R., Avery, L.W., Richardson, K.J., Griffin, M.J., Cronin, N.J., Monteiro, T., Hilton, J. 289

The electron thermal conduction in young supernova remnants
Bedogni, R., D'Ercole, A. 320

(RN) AG Carinae. II. IUE observations of the ring nebula
Viotti, R., Cassatella, A., Ponz, D., Thé, P.S. 333

(RN) High-resolution profiles of diffuse interstellar bands as functions of the structure of the interstellar medium
Krełowski, J., Westerlund, B.E. 339

Celestial mechanics and astrometry

ELP 2000-85: a semi-analytical lunar ephemeris adequate for historical times
Chapront-Touzé, M., Chapront, J. 342

Instruments, data processing, and computational methods

The reduction of scanning noise in raster scanned data
Emerson, D.T., Gräve, R. 353

Wavefront error separation method for optical systems with aspherical surfaces
Haarala, S. 359

One-dimensional image-correlation analysis for self-calibration in aperture synthesis
Mingzhi Wei 362